CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

August 8, 1997 / Vol. 46 / No. 31

MMWR™
MORBIDITY AND MORTALITY WEEKLY REPORT

Knowledge and Use of Folic Acid by Women of Childbearing Age — United States, 1997

Each year in the United States, approximately 4000 pregnancies are affected by spina bifida and anencephaly. Babies born with spina bifida usually survive, often with serious disability, but anencephaly is invariably fatal. The B vitamin folic acid can reduce the occurrence of spina bifida and anencephaly by at least 50% when consumed daily before conception and during early pregnancy. In 1992, the Public Health Service (PHS) recommended that all women of childbearing age who are capable of becoming pregnant consume 400 µg of folic acid daily (*1*). Folic acid can be obtained from multivitamins or certain other supplements and from some fortified breakfast cereals. It is found naturally in orange juice, green leafy vegetables, and beans; however, it is difficult to obtain the recommended 400 µg daily through diet alone. This report summarizes findings from a survey conducted during January and February 1997 that indicate modest increases since 1995 in knowledge about and consumption of folic acid among U.S. women aged 18–45 years and highlights the need for additional public health efforts to take full advantage of this prevention opportunity.

In 1997, the March of Dimes contracted The Gallup Organization to conduct a random-digit–dialed telephone survey of a proportionate, stratified national sample of 2001 women aged 18–45 years to assess knowledge about folic acid and use of vitamin supplements. The participation rate was 50%. Statistical estimates were weighted to reflect the total population of women aged 18–45 years in the contiguous United States residing in households with telephones. The margin of error for estimates based on the total sample size is plus or minus two percentage points. The questionnaire and methods used in 1997 were identical to those used in a 1995 survey (*2*).

Overall, 30% of nonpregnant women (i.e., women who were not pregnant at the time of the survey) reported taking daily a multivitamin supplement containing folic acid; 19% of nonpregnant women aged <25 years reported taking vitamin supplements daily, compared with 33% of nonpregnant women aged ≥25 years. Among women who had had a pregnancy during the 2 years preceding the 1997 survey, 23% reported taking a daily vitamin containing folic acid before pregnancy.

A total of 66% of respondents said "yes" to the question "Have you ever heard or read anything about folic acid?"; 22% said they had heard of the PHS recommendation about folic acid. Of the survey respondents who knew about folic acid, 36% reported magazines and newspapers as the source of their knowledge about folic acid,

Folic Acid — Continued

22% reported radio and television, and 15% reported a health-care provider. Of women who were familiar with folic acid, 16% reported knowing that folic acid helps to prevent birth defects and 9% that folic acid should be taken before pregnancy. Twenty-two percent of women who had heard of folic acid knew that green leafy vegetables are good sources of folic acid, 8% knew that broccoli is a good source, and 16% knew that orange juice is a good source.

Reported by: RB Johnston, Jr, MD, DA Staples, March of Dimes Birth Defects Foundation, White Plains, New York. Birth Defects and Genetic Diseases Br, Div of Birth Defects and Developmental Disabilities, National Center for Environmental Health, CDC.

Editorial Note: The 1995 Gallup Organization–March of Dimes survey found a relatively low awareness of folic acid and of the PHS recommendation, illustrating the need for educational strategies to inform more women about the benefits of folic acid. One such strategy, the March of Dimes "Think Ahead" campaign conducted from June 1995 through January 1997, encouraged women to take 400 µg folic acid daily to reduce their risk for giving birth to a child with birth defects. The campaign included print and television public service advertising, outdoor and transit advertising, posters, and information printed on grocery bags and fast-food tray liners. In addition, the March of Dimes collaborated with the vitamin supplement and citrus industries that delivered folic acid and birth defects-prevention messages on product packaging, in-store displays, and paid print and television advertising. Because the survey in 1997 used the same methods as the survey in 1995, comparisons of the results from the two surveys provide rough measures of the effectiveness of educational campaigns conducted since the 1995 survey.

Overall, 30% of nonpregnant women reported taking a multivitamin containing folic acid on a daily basis in 1997, compared with 25% in 1995. Among women who had a pregnancy during the 2 years preceding the survey, the percentage who reported taking a daily vitamin containing folic acid before pregnancy increased only from 20% to 23%. Moreover, nonpregnant women aged <25 years were least likely to consume a multivitamin daily, with only 19% reporting that they did. These findings highlight the need for additional educational efforts targeted toward women aged <25 years, who account for approximately 39% of all births in the United States.

Awareness of folic acid has increased since 1995 among women of childbearing age: more women had heard or read about folic acid in 1997 than in 1995 (66% compared with 52%), and more women had heard about the PHS recommendation (22% compared with 15%) (*2*). Awareness that folic acid helps prevent birth defects increased among all respondents, from 5% in 1995 to 11% in 1997, and the proportion of women who knew that folic acid should be taken before pregnancy increased from 2% in 1995 to 6% in 1997.

The proportion of respondents reporting magazines and newspapers as the source of their knowledge about folic acid was similar in 1997 as in 1995. However, of all respondents, the proportion reporting radio and television increased from 6% in 1995 to 14% in 1997. This finding may be attributable to increased presentation of information about folic acid in the broadcast media (e.g., through television advertising campaigns and public service advertising) about the benefits of folic acid. There was little change in the percentage of respondents who reported their health-care provider as their source of information. To increase knowledge of and awareness about the bene-

Folic Acid — Continued

fits of folic acid, many state health departments are developing and implementing programs to encourage health-care providers to educate their patients.

In both the 1995 and 1997 surveys, when asked to name a food that is a good source of folic acid, approximately half of the women who had heard of folic acid were unable to do so. However, in 1997, 16% of those who had heard of folic acid identified orange juice as a good source, an increase from 6% in 1995. This increase is possibly a result of extensive advertising done by the citrus industry during the winter of 1996–97.

The findings described in this report are subject to at least one important limitation. The response rate for this telephone survey was low (50%, the same as for the 1995 survey). Knowledge and behavior patterns of nonparticipants may have been different from those of participants: participating women were more highly educated than the total U.S. population; therefore, the prevalence of use of vitamin supplements may have been higher among these women than among U.S. women in general because vitamin usage correlated positively with education (*3*).

The survey confirms the need for more public education strategies to increase awareness of the benefits of folic acid among women of childbearing age. However, the small behavioral change in comparison with the somewhat larger increase in awareness suggests that there may be a lag time between increased awareness and behavioral change. Further study is needed to identify effective approaches to increasing folic acid consumption and to evaluate approaches being used.

Further surveys will be needed to clarify reasons for the difference in the percentage of women who had had a pregnancy during the previous 2 years and who had taken vitamins before pregnancy (23%) and the percentage of nonpregnant women who reported taking vitamins (30%). A similar difference was observed in the 1995 survey.

In March 1996, the Food and Drug Administration issued regulations (*4*) requiring that folic acid be added to enriched cereal grain products, such as flours, corn meals, pasta, and rice, by January 1998. In addition, breakfast cereals can be fortified with up to 400 µg folic acid per serving; dietary supplements also can provide recommended levels of folic acid. These foods and their varying folic acid contents allow women of childbearing age several options for meeting the recommended daily intake of folic acid. Women should select diets with sufficient folic acid—either by following dietary guidelines for eating fortified breads and cereals or by using folic acid-containing breakfast cereals or dietary supplements. Educational programs are needed for women of childbearing age about the benefits of folic acid and the options for achieving adequate daily intakes.

References

1. CDC. Recommendations for the use of folic acid to reduce the number of cases of spina bifida and other neural tube defects. MMWR 1992;41(no. RR-14).
2. CDC. Knowledge and use of folic acid by women of childbearing age—United States, 1995. MMWR 1995;44:716–8.
3. Block G, Cox C, Madans J, Schreiber GB, Licitra L, Melia N. Vitamin supplement use, by demographic characteristics. Am J Epidemiol 1988;127:297–309.
4. Food and Drug Administration. Food standards: amendment of standards of identity for enriched grain products to require addition of folic acid. Federal Register 1996;61:8781–97.

Landmine-Related Injuries, 1993–1996

During 1980–1993, the incidence of landmine-related injuries doubled, resulting in an estimated 2000 deaths or injuries each month (*1*). Approximately 120 million landmines are buried in 71 countries throughout the world, and 2–5 million new landmines are planted each year. Some countries, such as Afghanistan, Angola, and Cambodia, have approximately 10 million landmines each (*2*). Landmines can have profound medical, environmental, and economic consequences, particularly for the civilian populations of those countries burdened with landmines. However, the consequences of landmines extend beyond the borders of those countries. Health-care workers and nongovernmental organizations are increasingly asked to assist emergency-affected, displaced, and refugee populations in regional conflicts, resulting in their increased exposure to landmines. This report describes three cases of landmine-related injury and illustrates the public health consequences of those injuries and the potential role for public health workers in preventing those injuries.

Case Reports

Case 1. On December 13, 1993, a 31-year-old relief worker with the International Rescue Committee in Somalia suffered traumatic amputation of the right foot and blast and shrapnel injuries to both lower legs after his vehicle struck a landmine. The patient underwent emergency surgery in Kenya, where a below-the-knee amputation was performed on the right lower leg. He suffered profound blood loss, requiring 16–17 units of transfused blood. He was evacuated to Switzerland and subsequently to the United States, where he remained hospitalized for 2 months. During 1994–1996, he underwent seven surgical procedures to save his lower left leg. In February 1997, a below-the-knee amputation of his lower left leg was performed. Total medical expenses have exceeded $300,000. The patient is undergoing rehabilitation.

Case 2. On October 29, 1995, a 53-year-old nursing coordinator with the American Refugee Committee working in the Democratic Republic of the Congo (formerly Zaire) was traveling in a vehicle that struck a landmine. The blast hurled the vehicle approximately 25 feet, and the patient suffered traumatic amputation of both lower legs, a broken jaw, and shrapnel wounds to the trunk and face. She was evacuated to Kenya, where she underwent bilateral below-the-knee amputations and multiple blood transfusions. The patient has since undergone several surgical procedures for reconstruction of her face. Total medical costs have been approximately $1 million.

Case 3. On March 16, 1996, a 38-year-old resident of Afghanistan working for CARE/Afghanistan was driving a vehicle that struck a landmine. He suffered facial lacerations and a fracture of the left upper arm and lost an estimated 1500 cc of blood. The patient remained hospitalized for 6 weeks. He experienced profound memory loss and has been under psychiatric and neurologic care since his injury.

Reported by: K Rutherford, Landmines Survivors Network, Washington, DC. J Hersman, A Kozlowski, American Refugee Committee, Minneapolis, Minnesota. P Giannone, CARE International, Atlanta. Div of Violence Prevention, National Center for Injury Prevention and Control; International Emergency and Refugee Health Program, National Center for Environmental Health, CDC.

Editorial Note: Both combatants and civilians, such as the local resident and relief workers described in this report, are at risk for landmine-related injuries. In many countries, most victims of landmines are civilian men, women, and children (*3,4*).

Landmine-Related Injuries — Continued

The health consequences of landmines include deaths, injuries, subsequent disabilities, and investments in health-care resources they require. An estimated 800 persons die each month from landmine-related injuries, and 1200 persons are nonfatally injured (*1,2*). Approximately one third of surviving landmine victims require amputations and often require a disproportionate amount of health-care resources (*5*). Compared with patients with other war-related injuries, amputees require nearly three times as many units of blood and four times as many surgical procedures (*6*).

Environmental health consequences in areas with large quantities of landmines include limited access to safe drinking water and arable farmland, which can result in increased waterborne diseases and malnutrition (*7*). In addition, persons leaving landmine-contaminated rural areas can lead to overcrowding in urban areas, increasing the risk for transmission of infectious diseases. Finally, as health-care resources are directed toward the care and rehabilitation of landmine victims, they are diverted away from other public health priorities (e.g., vaccination, sanitation, nutrition, and vector-control programs), possibly resulting in higher death rates, particularly for women and children, through increased malnutrition and decreased vaccination coverage (*7*).

In addition to their health consequences, landmines also exact an economic toll. The most serious economic issues include the treatment and rehabilitation of landmine victims, their loss of productivity and quality of life, and the clearance of landmine-infested areas. Treating a landmine survivor costs an average of $3000–$5000, a substantial amount in developing countries (*1*). Treating all landmine victims worldwide would require $750 million. Although landmines are relatively inexpensive to produce, ranging from $3 to $30, clearing a single mine can cost $300–$1000 (*1,8*). Many of the countries contaminated with landmines cannot provide for the costs of victim rehabilitation and mine clearance and have become increasingly dependent on the international community.

Because clearing all existing minefields is unlikely in the near future, efforts also should focus on preventing the devastating medical effects of existing landmines. Landmine-related injuries can be prevented by adapting health strategies that have been successful in decreasing the number of other injury-related problems (e.g., deaths caused by motor-vehicle crashes) (*9*).

Some prevention efforts are already in place, such as mine-awareness programs, in which residents are taught to identify landmines and to avoid areas that are known or suspected minefields. These programs should be supported and expanded by the public health community. For example, high-risk areas and populations can be identified through hospital surveillance and cluster surveys, thus facilitating the allocation of limited resources and the development of effective prevention strategies. Once these strategies are developed, health-care workers can assist in evaluating them and replicating those that are most effective.

References

1. Office of International Security and Peacekeeping Operations. Hidden killers: the global landmine crisis. Washington, DC: US Department of State, Bureau of Political-Military Affairs, 1994.
2. International Committee of the Red Cross. Anti-personnel mines: an overview 1996. Geneva, Switzerland: International Committee of the Red Cross, 1996.
3. Coupland RM, Korver A. Injuries from antipersonnel mines: the experience of the International Committee of the Red Cross. BMJ 1991;303:1509–12.

Landmine-Related Injuries — Continued

4. Jeffrey SJ. Antipersonnel mines: who are the victims? J Accid Emerg Med 1996;13:343–6.
5. Coupland RM. The effect of weapons: defining superfluous injury and unnecessary suffering. Medicine and Global Survival 1996;3;A1.
6. Eshaya-Chauvin B, Coupland RM. Transfusion requirements for the management of war injured: the experience of the International Committee of the Red Cross. Br J Anaesth 1992; 68:221–3.
7. Kakar F, Bassani F, Romer CJ, Gunn SW. The consequences of land mines on public health. Prehospital and Disaster Medicine 1996;11:2–10.
8. Andersson N, da Sousa CP, Paredes S. Social cost of land mines in four countries: Afghanistan, Bosnia, Cambodia, and Mozambique. BMJ 1995;311:718–21.
9. Mercy JA, Rosenberg ML, Powell KE, Broome CV, Roper WL. Public health policy for preventing violence. Health Aff 1993;12:7–29.

Asthma Hospitalizations and Readmissions Among Children and Young Adults — Wisconsin, 1991–1995

Asthma is the most frequent reason for preventable hospital admissions among children (*1,2*). During 1980–1993, national asthma surveillance demonstrated increasing rates of hospital admission for persons aged <25 years (*3*). These increasing rates could be attributed to an increase in either the number of persons admitted, readmitted, or both (*4*). To determine the number of persons with asthma sufficiently severe to require hospitalization and to characterize admission/readmission patterns for persons with asthma, the Wisconsin Department of Health and Family Services (WDHFS) analyzed data from the Wisconsin Asthma Surveillance System (WASS). This report summarizes the findings from WASS, which indicate that, during 1991–1995, an annual average of 18% of all asthma admissions among Wisconsin residents aged <25 years were readmissions.

WDHFS analyzed hospital discharge data from WASS to identify all hospital admissions for asthma during 1991–1995 among Wisconsin residents aged <25 years. In Wisconsin, all hospitals are required to report discharge data to the state health department. Admissions were considered asthma related if the primary diagnosis was asthma (*International Classification of Diseases, Ninth Revision, Clinical Modification* [ICD-9-CM], code 493) or if the primary diagnosis was respiratory illness (ICD-9-CM codes 460–496) with a second or third diagnosis of asthma. In this analysis, the number of asthma-related admissions does not equal the number of persons admitted to a hospital for asthma because some persons were readmitted for asthma during the specified time periods. An admission was classified as a readmission if two or more database entries matched on 1) hospital and medical record number or 2) encrypted patient identifier, date of birth, sex, and zip code. Transfer admissions were excluded from analysis. Race-specific analyses were restricted to blacks and whites because numbers for other racial groups were too small to calculate stable estimates. Rates were age adjusted to the 1990 Wisconsin census. Denominators for all rates were U.S. Bureau of the Census intercensal estimates for Wisconsin.

During 1991–1995, a total of 11,804 Wisconsin residents aged <25 years accounted for 17,678 hospital admissions for asthma. Of these admissions, 82% had a primary discharge diagnosis of asthma, 15% had a primary diagnosis of respiratory illness and a second diagnosis of asthma, and 3% had a primary diagnosis of respiratory illness

Asthma — Continued

and a third diagnosis of asthma. During this 5-year period, 33% of all asthma-related admissions were readmissions, and 26% of the persons admitted for asthma accounted for 51% of all asthma-related admissions.

During 1991–1995, the average annual number of asthma-related admissions among persons aged <25 years was 3535; of these, 616 (18%) were readmissions (Table 1). On average, blacks were five times more likely than whites to be admitted to a hospital for asthma (64 versus 13 per 10,000 persons aged <25 years, p<0.001). For blacks and whites, readmissions accounted for 23% and 15%, respectively, of all asthma-related admissions. In addition, blacks were approximately 50% more likely than whites to be readmitted to a hospital for asthma (19% versus 12%, p<0.001).

Based on age-specific data, the average annual number of asthma-related admissions was highest for persons aged 0–4 years (1661); of these, 384 (23%) were readmissions. In contrast, among persons aged 5–14 years and 15–24 years, 13% and 12% of all asthma-related admissions, respectively, were readmissions.

During 1991–1995, the annual asthma admission rate remained relatively unchanged (Table 2). For each year of this period, 17%–18% of all asthma-related admissions were readmissions.

TABLE 1. Average annual number and rate* of asthma-related admissions and percentage of readmissions for persons aged <25 years, by race† and age group — Wisconsin, 1991–1995

Characteristic	No. admissions	No. persons admitted	Admission rate (events)	Admission rate (persons)	% Readmissions§ (hospitalizations)	% Readmissions¶ (persons)
Race**						
Black	1118	864	82.4	63.7	22.8%	18.6%
White	2417	2055	14.8	12.6	14.9%	11.7%
Age group (yrs)						
0– 4	1661	1277	48.8	37.5	23.1%	15.5%
5–14	1209	1058	16.3	14.3	12.5%	13.2%
15–24	665	584	9.7	8.5	12.2%	13.5%
Total**	**3535**	**2919**	**20.0**	**16.5**	**17.5%**	**13.8%**

*Per 10,000 persons aged <25 years per year.
†Numbers for racial groups other than black and white were too small to calculate stable estimates.
§Percentage of total. Admissions minus persons admitted divided by admissions.
¶Percentage of total during the year.
**Age-adjusted to the 1990 Wisconsin census.

TABLE 2. Number and rate* of asthma-related admissions and percentage of readmissions for persons aged <25 years, by year — Wisconsin, 1991–1995

Year	No. admissions	No. persons admitted	Admission rate (events)	Admission rate (persons)	% Readmissions† (hospitalizations)	% Readmissions§ (persons)
1991	3583	2941	20.4	16.7	17.9%	15.3%
1992	3712	3050	21.1	17.3	17.8%	14.8%
1993	3848	3175	21.7	17.9	17.5%	14.4%
1994	3127	2603	17.7	14.7	16.8%	10.5%
1995	3408	2825	19.3	16.0	17.1%	13.9%

* Per 10,000 persons aged <25 years. Age-adjusted to the 1990 Wisconsin census.
† Percentage of total. Admissions minus persons admitted divided by admissions.
§ Percentage of total during the year.

Asthma — Continued

Reported by: J Goldring, PhD, L Hanrahan, PhD, HA Anderson, MD, Environmental/ Occupational Epidemiologist, PL Remington, MD, Chronic Disease Epidemiologist, Div of Health, Wisconsin Dept of Health and Family Svcs. Div of Applied Public Health Training (proposed), Epidemiology Program Office, CDC.

Editorial Note: One national health objective for the year 2000 is to reduce asthma admissions to <19 per 10,000 persons (objective 11.1) (*5*). The data from WASS in this report indicate that Wisconsin's asthma admission rate during 1991–1995 was 20 admissions per 10,000 persons aged <25 years. However, using the number of persons admitted at least once for asthma in the numerator rather than the number of admissions, the average annual asthma admission rate during this period was 17 persons per 10,000. The percentage difference in these two rates (18%) resulted from readmission of persons previously admitted for asthma during the year.

Characterization of risk factors for asthma-related readmission can enable development of interventions to prevent readmissions. The high frequency of asthma- related admissions and the disporportionate number of readmissions among blacks suggest that efforts to reduce asthma-related admissions should target persons who have been hospitalized for asthma. Previous studies indicate that the race-specific differences in asthma admission rates are associated with socioeconomic status (*6,7*).

The findings in this report are subject to at least two limitations. First, erroneous data entry of any of the six variables used to identify persons admitted to a hospital for asthma could result in misclassification of an event as an incident admission instead of a readmission. Similarly, patients who move within the state may not be correctly identified as prevalent cases.

The findings from WASS highlight the importance of analyzing longitudinal, patient-specific data about asthma. Although most states collect hospital discharge data that can be used for asthma surveillance, few states have asthma surveillance programs (*8*).

Ongoing surveillance is necessary to assess the impact of practice guidelines and interventions (*9*) to prevent asthma hospitalizations. WASS can monitor the impact of intervention efforts on asthma admission and readmission rates and the number of persons requiring hospitalization for asthma. Patient-specific data provide more detailed information about the burden of asthma than admission data alone and can augment admission rates as a benchmark in assessing progress toward improved management of asthma.

References

1. Billings J, Zeitel L, Lukomnik J, Carey TS, Blank AE, Newman L. Impact of socioeconomic status on hospital use in New York City. Health Aff 1993;12:162–73.
2. Weissman JS, Gatsonis C, Epstein AM. Rates of avoidable hospitalization by insurance status in Massachusetts and Maryland. JAMA 1992;268:2388–94.
3. CDC. Asthma mortality and hospitalization among children and young adults—United States, 1980–1993. MMWR 1996;45:350–3.
4. To T, Dick P, Feldman W, Hernandez R. A cohort study on childhood asthma admissions and readmissions. Pediatrics 1996;98:191–5.
5. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50212.
6. Wissow LS, Gittelsohn AM, Szklo M, et al. Poverty, race, and hospitalization for childhood asthma. Am J Public Health 1988;78:777–82.

Asthma — Continued

7. Halfon N, Newacheck PW. Childhood asthma and poverty: differential impacts and utilization of health services. Pediatrics 1993;91:56–61.
8. National Heart, Lung, and Blood Institute. National Asthma Education and Prevention Program Task Force on the Cost Effectiveness, Quality of Care, and Financing of Asthma Care. Bethesda, Maryland: US Department of Health and Human Services, Public Health Service, National Institutes of Health, 1996; DHHS publication no. (NIH)55-807.
9. CDC. Asthma surveillance programs in public health departments—United States. MMWR 1996;45:802–4.

Notice to Readers

Satellite Broadcast on HIV Prevention

"HIV Prevention Update," a satellite broadcast, will be held Thursday, October 23, 1997, from 1 p.m. to 3:30 p.m. eastern daylight time. Cosponsors are the National Alliance of State and Territorial AIDS Directors, CDC, and the Public Health Training Network. This forum, the second in the "HIV Prevention Update" series, will involve two topics: prevention case management and partner notification.

This broadcast is designed for staff and volunteers working in HIV prevention at community-based organizations; health departments; and community-planning groups, including educators and program administrators. Experts will identify the essential components of prevention case management and provide information about new guidance documents. The speakers will discuss current research findings and provide information about recently updated programmatic guidelines. Viewers will be able to submit questions before, during, or after the program.

Additional information is available through the CDC fax information system, telephone (888) 232-3299, by requesting document number 130012.

Notice to Readers

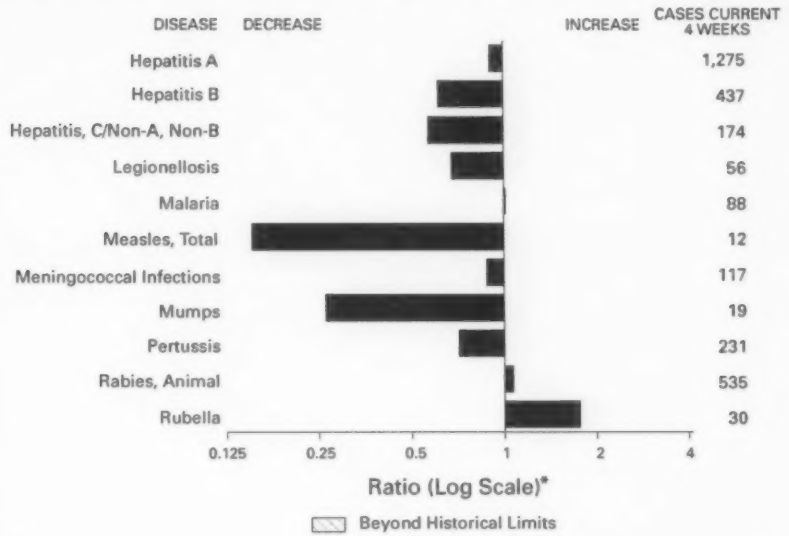
Prevention 98 Conference: Translating Science into Action

Prevention 98, the 15th annual national preventive medicine meeting, will be sponsored by the American College of Preventive Medicine and the Association of Teachers of Preventive Medicine in collaboration with CDC and other national health agencies in San Francisco, California, April 2–5, 1998. The conference will examine preventive medicine expertise and explore ways to translate this expertise into ethical, effective, evidence-based action and policy. Information about registration and submission of abstracts is available from the Meeting Manager, Prevention 98, 1660 L Street, N.W., Suite 206, Washington, DC 20036-5603; telephone (202) 466-2569.

Erratum: Vol. 46, No. 30

The table "Notifiable Diseases—Reported Cases, by Geographic Division and Area, United States, 1996 (continued)" on page 718 contained an error. In the Congenital Syphilis column, the numbers of reported cases for Hawaii, New Mexico, Utah, and the Virgin Islands were incorrect. No cases of congenital syphilis were reported for these four jurisdictions, which should have been denoted by a dash ("–"). This error will be corrected when the *Summary of Notifiable Diseases, United States, 1996*, is published.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending August 2, 1997, with historical data — United States



*Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — provisional cases of selected notifiable diseases, United States, cumulative, week ending August 2, 1997 (31st Week)

	Cum. 1997		Cum. 1997
Anthrax	-	Plague	1
Brucellosis	37	Poliomyelitis, paralytic	-
Cholera	3	Psittacosis	21
Congenital rubella syndrome	2	Rabies, human	2
Cryptosporidiosis*	783	Rocky Mountain spotted fever (RMSF)	176
Diphtheria	5	Streptococcal disease, invasive Group A	979
Encephalitis: California*	7	Streptococcal toxic-shock syndrome*	23
eastern equine*	-	Syphilis, congenital¶	190
St. Louis*	1	Tetanus	26
western equine*	1	Toxic-shock syndrome	70
Hansen Disease	64	Trichinosis	4
Hantavirus pulmonary syndrome*†	11	Typhoid fever	166
Hemolytic uremic syndrome, post-diarrheal*	25	Yellow fever	-
HIV infection, pediatric*§	150		

-:no reported cases
*Not notifiable in all states.
†Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§Updated monthly to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update July 29, 1997.
¶Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 2, 1997, and August 3, 1996 (31st Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB	
					NETSS†	PHLIS§				
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1997	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996
UNITED STATES	34,732	39,797	248,683	240,068	1,071	573	155,630	176,961	1,843	2,106
NEW ENGLAND	1,478	1,582	9,783	10,062	90	40	3,276	3,729	40	58
Maine	36	29	583	533	8	-	34	29	-	-
N.H.	19	50	447	428	4	3	62	90	8	5
Vt.	23	14	228	251	4	1	32	34	1	16
Mass.	533	739	4,209	3,879	58	36	1,322	1,260	24	32
R.I.	99	113	1,145	1,200	2	-	260	300	7	5
Conn.	768	637	3,171	3,771	14	-	1,566	2,016	-	-
MID. ATLANTIC	11,041	11,142	34,290	38,943	54	18	20,332	24,508	203	176
Upstate N.Y.	1,754	1,382	N	N	36	4	3,116	4,403	157	140
N.Y. City	5,750	6,277	17,840	20,749	8	-	7,988	9,408	-	3
N.J.	2,211	2,111	5,294	7,417	10	8	3,891	4,712	-	-
Pa.	1,326	1,372	11,156	10,777	N	6	5,337	5,985	46	33
E.N. CENTRAL	2,441	3,208	34,474	51,155	210	112	21,401	33,832	320	306
Ohio	525	691	7,110	12,083	49	20	4,870	8,603	11	20
Ind.	396	430	5,300	5,638	37	10	3,532	3,672	9	7
Ill.	899	1,396	6,337	14,581	42	-	3,096	9,867	49	60
Mich.	460	521	10,649	12,556	82	63	7,734	8,841	251	219
Wis.	161	170	5,078	6,297	N	19	2,169	2,849	-	-
W.N. CENTRAL	650	919	13,796	18,430	220	137	6,577	8,559	100	62
Minn.	128	169	U	3,128	118	96	U	1,381	3	1
Iowa	75	63	2,571	2,525	32	9	704	642	21	29
Mo.	275	462	6,710	7,645	26	22	4,426	4,937	63	14
N. Dak.	9	11	473	559	8	5	35	17	2	-
S. Dak.	4	8	750	760	11	-	81	106	-	-
Nebr.	67	65	1,098	1,142	15	-	405	252	2	6
Kans.	92	141	2,194	2,671	10	5	926	1,224	9	12
S. ATLANTIC	8,425	9,676	53,917	29,839	111	48	51,768	55,839	179	104
Del.	159	189	1,276	1,148	3	3	699	850	-	-
Md.	1,075	1,145	4,154	U	11	3	7,742	5,968	10	2
D.C.	598	644	N	N	-	-	2,600	2,646	-	-
Va.	719	645	6,787	6,396	N	18	4,613	5,568	18	8
W. Va.	62	73	1,742	1,230	N	-	549	441	13	7
N.C.	503	539	11,014	U	35	19	10,649	11,021	34	30
S.C.	484	498	7,461	U	2	2	6,651	6,474	27	16
Ga.	1,064	1,413	7,621	7,137	26	-	8,391	12,366	U	-
Fla.	3,761	4,530	13,862	13,928	33	3	9,874	10,505	77	41
E.S. CENTRAL	1,193	1,306	19,193	17,815	61	26	19,117	18,930	218	379
Ky.	211	209	3,884	4,068	21	-	2,453	2,457	10	21
Tenn.	501	497	7,582	7,715	30	26	6,313	6,688	152	288
Ala.	285	364	4,736	4,835	7	-	6,793	7,822	6	3
Miss.	196	236	2,991	1,197	3	-	3,558	1,963	50	67
W.S. CENTRAL	3,615	3,934	34,174	15,469	37	5	21,221	13,195	265	211
Ark.	131	169	735	1,057	5	1	1,568	2,503	-	4
La.	622	908	5,260	3,987	4	3	4,936	4,302	127	123
Okla.	188	166	4,412	4,461	2	1	2,774	2,749	6	1
Tex.	2,674	2,691	23,767	5,964	26	-	11,943	3,641	132	83
MOUNTAIN	1,022	1,189	13,585	14,887	125	71	4,200	4,724	239	369
Mont.	26	22	644	748	10	-	27	15	13	11
Idaho	34	25	828	917	15	8	63	65	34	88
Wyo.	13	3	309	381	6	-	28	21	98	118
Colo.	250	333	1,896	1,182	54	39	1,210	1,080	25	34
N. Mex.	104	111	2,026	2,417	5	4	686	496	32	44
Ariz.	255	342	5,427	6,638	N	14	1,607	2,298	23	43
Utah	82	114	954	862	28	-	140	166	3	14
Nev.	258	239	1,501	1,742	7	6	439	583	11	17
PACIFIC	4,867	6,840	35,471	43,468	163	113	7,738	13,645	279	441
Wash.	421	445	5,428	5,886	33	22	1,138	1,279	18	36
Oreg.	188	311	2,892	3,292	50	54	444	502	4	6
Calif.	4,187	5,946	25,392	32,565	72	31	5,655	11,318	165	275
Alaska	36	16	810	669	8	1	225	261	-	2
Hawaii	35	122	949	1,056	N	5	276	285	92	122
Guam	2	4	31	242	N	-	3	42	-	6
P.R.	1,199	1,337	U	U	26	U	376	375	72	106
V.I.	71	16	N	N	N	U	-	-	-	-
Amer. Samoa	-	-	-	-	N	U	-	-	-	-
C.N.M.I.	1	-	N	N	N	U	17	11	2	-

N: Not notifiable U: Unavailable -: no reported cases C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update July 29, 1997.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending August 2, 1997, and August 3, 1996 (31st Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997
UNITED STATES	492	466	3,098	6,251	866	813	4,650	6,781	9,664	11,045	4,375
NEW ENGLAND	36	25	725	1,622	39	31	93	103	247	248	661
Maine	1	1	7	11	1	6	-	-	11	16	127
N.H.	4	-	9	24	1	1	-	1	10	8	25
Vt.	6	4	5	10	2	2	-	-	3	1	90
Mass.	9	13	112	76	16	11	45	47	147	110	137
R.I.	5	7	170	187	5	3	2	1	18	24	13
Conn.	11	N	422	1,314	14	8	46	54	58	89	269
MID. ATLANTIC	88	106	1,787	3,847	220	251	225	303	1,815	1,974	897
Upstate N.Y.	23	30	578	1,862	41	49	20	48	234	222	668
N.Y. City	3	8	27	202	114	142	50	93	938	1,051	-
N.J.	12	9	547	844	49	44	88	103	376	422	99
Pa.	50	59	635	939	16	16	67	59	267	279	130
E.N. CENTRAL	150	158	44	262	77	102	373	1,106	1,002	1,172	90
Ohio	76	53	29	13	12	9	116	425	177	168	64
Ind.	27	36	13	13	8	9	85	142	88	108	8
Ill.	5	22	2	8	27	51	38	307	510	638	6
Mich.	36	29	-	6	24	21	72	109	157	199	11
Wis.	6	18	U	222	6	12	62	123	70	59	1
W.N. CENTRAL	45	23	44	87	31	21	87	224	318	287	285
Minn.	1	2	27	13	10	5	U	26	83	67	29
Iowa	12	3	5	13	10	2	6	15	38	39	103
Mo.	12	5	7	34	6	8	57	159	128	119	11
N. Dak.	2	-	-	-	2	-	-	-	8	3	41
S. Dak.	2	2	1	-	-	-	-	-	7	14	40
Nebr.	12	9	3	1	1	2	3	8	12	13	1
Kans.	4	2	1	26	2	4	21	16	42	32	60
S. ATLANTIC	72	65	321	277	185	130	1,949	2,286	1,891	1,996	1,809
Del.	6	9	27	107	2	3	16	23	11	27	41
Md.	17	9	227	100	52	35	521	399	183	173	330
D.C.	3	6	7	1	10	7	77	89	59	81	3
Va.	13	12	18	20	42	21	149	265	165	178	360
W. Va.	N	N	1	8	-	2	3	2	33	37	52
N.C.	9	6	20	32	9	14	432	633	230	283	556
S.C.	3	4	1	3	10	8	237	243	196	208	99
Ga.	-	2	1	1	20	14	328	400	362	387	189
Fla.	21	17	19	5	40	26	186	232	652	622	179
E.S. CENTRAL	30	27	44	47	18	21	1,037	1,547	681	849	158
Ky.	4	2	6	15	4	6	88	81	109	145	19
Tenn.	20	13	23	16	4	8	468	511	245	295	85
Ala.	2	2	4	3	7	3	277	330	233	261	54
Miss.	4	10	11	13	3	4	204	625	94	148	-
W.S. CENTRAL	13	5	40	56	7	16	674	746	1,252	1,306	222
Ark.	-	1	11	19	2	-	67	165	118	118	27
La.	2	1	2	1	5	2	225	325	-	8	2
Okla.	3	3	9	3	-	-	70	118	107	104	69
Tex.	8	-	18	33	-	14	312	138	1,027	1,076	124
MOUNTAIN	29	26	11	4	48	31	88	93	298	375	88
Mont.	1	1	-	-	2	3	-	-	7	14	25
Idaho	2	-	2	-	-	-	-	2	8	5	-
Wyo.	1	3	2	3	2	3	-	2	2	3	20
Colo.	8	7	4	-	24	14	4	24	57	51	-
N. Mex.	1	1	-	-	6	1	8	4	16	56	8
Ariz.	7	7	1	-	7	4	65	49	149	142	32
Utah	6	2	-	1	3	4	4	2	13	34	-
Nev.	3	5	2	-	4	2	7	10	46	70	3
PACIFIC	29	31	82	49	241	210	124	373	2,160	2,838	165
Wash.	6	3	4	4	10	12	7	7	136	155	-
Oreg.	-	-	11	12	14	16	6	4	100	104	7
Calif.	22	26	67	32	212	173	109	360	1,772	2,418	139
Alaska	-	1	-	-	3	3	1	-	49	50	19
Hawaii	1	1	-	1	2	6	1	2	103	111	-
Guam	-	1	-	-	-	-	-	3	5	55	-
P.R.	-	-	-	-	3	1	148	143	129	105	40
V.I.	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	-	9	1	2	-	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending August 2, 1997, and August 3, 1996 (31st Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	1997	Cum. 1997	1997	Cum. 1997	Cum. 1997	Cum. 1996
UNITED STATES	671	702	15,962	16,175	5,068	5,664	3	55	2	36	91	358
NEW ENGLAND	36	22	386	191	91	129	-	10	-	5	15	12
Maine	3	-	45	12	6	2	-	-	-	-	-	-
N.H.	5	10	21	9	7	8	-	1	-	-	1	-
Vt.	3	-	7	4	5	10	-	-	-	-	-	1
Mass.	22	11	145	96	34	41	-	9	-	4	13	10
R.I.	2	1	92	9	11	7	-	-	-	-	-	-
Conn.	1	-	76	61	28	61	-	-	-	1	1	1
MID. ATLANTIC	76	143	1,172	1,094	730	896	-	12	-	5	17	32
Upstate N.Y.	14	35	176	247	160	215	-	2	-	3	5	7
N.Y. City	21	37	439	338	259	320	-	4	-	1	5	10
N.J.	31	38	184	225	136	177	-	1	-	-	1	3
Pa.	10	33	373	284	175	184	-	5	-	1	6	12
E.N. CENTRAL	111	120	1,523	1,471	519	654	-	5	-	3	8	16
Ohio	65	68	213	526	54	83	-	-	-	-	-	2
Ind.	11	7	184	188	62	86	-	-	-	-	-	-
Ill.	24	32	338	376	124	196	-	5	-	1	6	3
Mich.	10	8	701	254	261	231	-	-	-	2	2	2
Wis.	1	5	87	127	18	58	-	-	-	-	-	9
W.N. CENTRAL	35	30	1,231	1,288	306	285	-	9	-	3	12	17
Minn.	25	18	111	69	23	31	-	-	-	3	3	15
Iowa	3	3	222	222	33	39	-	-	-	-	-	-
Mo.	3	6	634	664	219	171	-	1	-	-	1	1
N. Dak.	-	-	10	28	2	-	-	-	-	-	-	-
S. Dak.	2	1	15	39	-	2	-	8	-	-	8	-
Nebr.	1	1	59	89	9	20	-	-	-	-	-	-
Kans.	1	1	180	177	20	22	-	-	-	-	-	1
S. ATLANTIC	116	127	1,001	640	736	766	1	3	1	8	11	8
Del.	-	2	21	8	4	6	-	-	-	-	-	1
Md.	46	42	158	116	109	103	-	-	-	2	2	1
D.C.	2	5	16	20	24	26	-	-	-	1	1	-
Va.	7	6	126	93	78	88	-	-	-	1	1	2
W. Va.	3	6	6	12	9	14	-	-	-	-	-	-
N.C.	17	20	118	82	151	227	1	1	-	1	2	2
S.C.	3	4	68	31	62	49	-	-	1	1	1	-
Ga.	22	30	200	48	71	8	-	-	-	1	1	1
Fla.	16	12	288	230	228	245	-	2	-	1	3	1
E.S. CENTRAL	36	20	385	886	411	495	-	-	-	-	-	-
Ky.	5	5	49	24	25	46	-	-	-	-	-	-
Tenn.	23	8	242	595	277	274	-	-	-	-	-	-
Ala.	8	6	59	120	41	40	-	-	-	-	-	-
Miss.	-	1	35	147	68	135	-	-	-	-	-	-
W.S. CENTRAL	33	30	3,439	3,165	686	677	-	3	1	3	6	19
Ark.	1	-	157	287	37	50	-	-	-	-	-	-
La.	7	3	130	101	83	70	-	-	-	-	-	-
Okla.	22	23	986	1,331	24	24	-	-	-	-	-	-
Tex.	3	4	2,166	1,446	542	533	-	3	1	3	6	19
MOUNTAIN	71	38	2,560	2,644	550	675	1	7	-	1	8	114
Mont.	-	-	54	80	6	7	-	-	-	-	-	-
Idaho	1	1	85	145	17	67	-	-	-	-	-	1
Wyo.	2	-	21	25	23	27	-	-	-	-	-	-
Colo.	9	11	266	262	108	74	-	-	-	-	-	7
N. Mex.	8	9	201	272	179	230	-	-	-	-	-	8
Ariz.	28	12	1,305	1,013	123	157	-	5	-	-	5	8
Utah	3	5	385	599	61	63	1	1	-	-	1	85
Nev.	20	-	243	248	33	50	U	1	U	1	2	5
PACIFIC	157	172	4,265	4,796	1,039	1,087	1	6	-	8	14	140
Wash.	3	2	314	319	48	59	1	1	-	-	1	37
Oreg.	25	23	232	594	72	69	-	-	-	-	-	7
Calif.	119	141	3,615	3,799	897	945	-	3	-	7	10	31
Alaska	3	4	24	31	14	6	-	-	-	-	-	63
Hawaii	7	2	80	53	8	8	-	2	-	1	3	2
Guam	-	-	-	6	1	-	U	-	U	-	-	-
P.R.	-	1	194	124	877	605	-	-	-	-	-	2
V.I.	-	-	-	28	-	25	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	U	-	U	-	-	-
C.N.M.I.	6	10	1	1	34	5	U	1	U	-	1	-

N: Not notifiable U: Unavailable -: no reported cases

*Of 144 cases among children aged <5 years, serotype was reported for 79 and of those, 31 were type b.

†For imported measles, cases include only those resulting from importation from other countries.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending August 2, 1997, and August 3, 1996 (31st Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996
UNITED STATES	2,170	2,121	7	353	431	56	2,880	2,484	2	99	200
NEW ENGLAND	137	90	1	8	1	-	562	584	-	-	24
Maine	15	10	-	-	-	-	6	20	-	-	-
N.H.	13	3	-	-	-	-	66	40	-	-	-
Vt.	3	3	-	-	-	-	180	13	-	-	2
Mass.	69	34	-	2	1	-	287	506	-	-	20
R.I.	11	10	1	5	-	-	12	-	-	-	-
Conn.	26	30	-	1	-	-	11	5	-	-	2
MID. ATLANTIC	196	233	-	32	56	4	183	160	-	3	9
Upstate N.Y.	50	59	-	7	17	-	56	82	-	1	4
N.Y. City	35	35	-	-	13	-	40	22	-	2	3
N.J.	43	51	-	-	2	-	5	9	-	-	2
Pa.	68	88	-	25	24	4	82	47	-	-	-
E.N. CENTRAL	306	305	-	40	90	7	224	303	-	4	3
Ohio	119	111	-	18	30	4	92	101	-	-	-
Ind.	34	44	-	6	5	-	35	19	-	-	-
Ill.	93	86	-	7	17	3	37	64	-	1	1
Mich.	36	31	-	9	37	-	31	27	-	-	2
Wis.	24	33	-	-	1	-	29	92	-	3	-
W.N. CENTRAL	162	169	-	13	11	1	180	92	-	-	-
Minn.	24	23	-	5	3	1	120	59	-	-	-
Iowa	38	37	-	6	1	-	19	3	-	-	-
Mo.	75	62	-	-	4	-	27	17	-	-	-
N. Dak.	1	3	-	-	2	-	2	1	-	-	-
S. Dak.	4	9	-	-	-	-	3	2	-	-	-
Nebr.	5	15	-	2	-	-	4	4	-	-	-
Kans.	15	20	-	-	1	-	5	6	-	-	-
S. ATLANTIC	389	337	2	50	67	7	288	254	-	61	89
Del.	5	2	-	-	-	-	-	14	-	-	-
Md.	36	39	-	4	23	4	87	96	-	-	-
D.C.	1	5	-	-	-	-	3	-	-	-	1
Va.	37	35	1	8	9	2	34	27	-	1	2
W. Va.	14	13	-	-	-	-	5	2	-	-	-
N.C.	72	58	-	7	14	-	80	47	-	50	75
S.C.	44	41	-	10	5	-	11	17	-	9	1
Ga.	75	100	-	5	2	-	9	13	-	-	-
Fla.	105	44	1	16	14	1	59	38	-	1	10
E.S. CENTRAL	172	147	-	16	18	1	65	161	-	-	2
Ky.	37	20	-	3	-	-	15	130	-	-	-
Tenn.	67	44	-	3	1	-	26	15	-	-	-
Ala.	52	45	-	6	3	1	16	9	-	-	2
Miss.	16	38	-	4	14	-	8	7	-	-	N
W.S. CENTRAL	213	232	-	33	30	2	73	75	-	3	7
Ark.	25	27	-	-	1	-	13	2	-	-	-
La.	42	45	-	11	11	1	13	6	-	-	1
Okla.	24	23	-	-	-	-	14	8	-	-	-
Tex.	122	137	-	22	18	1	33	59	-	3	6
MOUNTAIN	131	126	-	48	18	30	811	242	-	5	6
Mont.	8	6	-	-	-	5	15	12	-	-	-
Idaho	8	19	-	2	-	10	530	65	-	1	2
Wyo.	1	3	-	1	-	1	6	2	-	-	-
Colo.	36	22	-	3	3	4	171	79	-	-	2
N. Mex.	21	21	N	N	N	9	47	34	-	-	-
Ariz.	35	30	-	31	1	-	23	12	-	4	1
Utah	12	12	-	6	3	1	10	10	-	-	-
Nev.	10	13	U	5	11	U	9	28	U	-	1
PACIFIC	464	482	4	113	140	4	474	613	2	23	60
Wash.	56	63	-	13	18	4	216	220	-	5	12
Oreg.	95	84	N	N	N	-	18	35	-	-	1
Calif.	309	327	4	86	102	-	227	342	2	10	44
Alaska	1	5	-	2	2	-	2	1	-	-	-
Hawaii	3	3	-	12	18	-	11	15	-	8	3
Guam	-	4	U	1	4	U	-	-	U	-	-
P.R.	9	10	-	5	1	-	-	2	-	-	-
V.I.	-	-	-	-	1	-	-	-	-	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	4	-	U	-	-	U	-	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE IV. Deaths in 122 U.S. cities,* week ending August 2, 1997 (31st Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	531	375	95	33	12	16	40
Boston, Mass.	139	87	30	15	4	3	13
Bridgeport, Conn.	33	25	7	1	-	-	3
Cambridge, Mass.	U	U	U	U	U	U	U
Fall River, Mass.	12	12	-	-	-	-	1
Hartford, Conn.	62	39	14	4	2	3	2
Lowell, Mass.	23	17	5	1	-	-	3
Lynn, Mass.	12	10	1	1	-	-	1
New Bedford, Mass.	25	22	3	-	-	-	-
New Haven, Conn.	37	25	7	3	1	1	-
Providence, R.I.	49	32	11	1	2	3	1
Somerville, Mass.	4	2	2	-	-	-	-
Springfield, Mass.	55	40	7	4	1	3	7
Waterbury, Conn.	24	21	3	-	-	-	2
Worcester, Mass.	56	43	5	3	2	3	7
MID. ATLANTIC	2,251	1,523	469	172	50	37	95
Albany, N.Y.	38	29	6	1	2	-	4
Allentown, Pa.	24	22	2	-	-	-	1
Buffalo, N.Y.	64	46	13	3	-	2	1
Camden, N.J.	24	15	7	1	-	1	2
Elizabeth, N.J.	17	12	4	1	-	-	-
Erie, Pa.	41	32	6	2	-	1	1
Jersey City, N.J.	44	27	12	4	-	1	1
New York City, N.Y.	1,290	836	300	110	27	17	44
Newark, N.J.	45	18	16	8	3	-	3
Paterson, N.J.	U	U	U	U	U	U	U
Philadelphia, Pa.	300	213	50	22	8	7	16
Pittsburgh, Pa.§	72	46	15	6	2	3	8
Reading, Pa.	9	8	1	-	-	-	1
Rochester, N.Y.	107	79	13	6	6	3	5
Schenectady, N.Y.	25	19	5	1	-	-	2
Scranton, Pa.	29	25	3	1	-	-	-
Syracuse, N.Y.	64	45	14	2	2	1	3
Trenton, N.J.	22	17	1	3	-	1	2
Utica, N.Y.	18	17	1	-	-	-	-
Yonkers, N.Y.	18	17	-	1	-	-	1
E.N. CENTRAL	1,872	1,240	405	135	49	41	91
Akron, Ohio	50	33	11	5	1	-	-
Canton, Ohio	36	31	5	-	-	-	1
Chicago, Ill.	417	239	100	52	12	12	29
Cincinnati, Ohio	82	49	20	6	6	1	6
Cleveland, Ohio	141	87	42	5	3	4	1
Columbus, Ohio	136	105	20	4	3	4	8
Dayton, Ohio	132	88	31	8	2	3	3
Detroit, Mich.	187	116	47	13	6	5	6
Evansville, Ind.	50	39	6	5	-	-	2
Fort Wayne, Ind.	58	39	16	3	-	-	2
Gary, Ind.	10	5	2	3	-	-	-
Grand Rapids, Mich.	74	53	13	6	-	2	1
Indianapolis, Ind.	165	113	32	11	3	6	6
Lansing, Mich.	34	28	6	-	-	-	2
Milwaukee, Wis.	95	69	19	2	3	2	6
Peoria, Ill.	39	28	4	3	3	1	2
Rockford, Ill.	46	30	11	2	3	-	3
South Bend, Ind.	43	32	6	1	3	1	3
Toledo, Ohio	77	56	14	6	1	-	10
Youngstown, Ohio	U	U	U	U	U	U	U
W.N. CENTRAL	771	552	138	40	17	17	40
Des Moines, Iowa	86	66	12	5	1	2	6
Duluth, Minn.	30	24	5	1	-	-	3
Kansas City, Kans.	31	20	6	4	1	-	-
Kansas City, Mo.	97	61	24	4	2	-	5
Lincoln, Nebr.	28	20	7	1	-	-	2
Minneapolis, Minn.	178	141	27	7	1	2	12
Omaha, Nebr.	78	49	17	4	3	5	8
St. Louis, Mo.	123	87	20	7	5	4	-
St. Paul, Minn.	54	43	5	4	1	1	3
Wichita, Kans.	66	42	15	3	3	3	1
S. ATLANTIC	1,154	725	220	121	54	32	58
Atlanta, Ga.	157	94	40	13	6	4	4
Baltimore, Md.	171	104	32	25	6	4	18
Charlotte, N.C.	97	61	20	10	2	4	7
Jacksonville, Fla.	113	80	18	11	3	1	1
Miami, Fla.	113	67	26	14	4	2	-
Norfolk, Va.	52	35	8	2	3	4	1
Richmond, Va.	70	42	13	9	2	3	1
Savannah, Ga.	60	43	10	6	1	-	3
St. Petersburg, Fla.	64	42	13	4	2	3	3
Tampa, Fla.	133	89	15	13	11	5	18
Washington, D.C.	109	65	20	13	9	2	2
Wilmington, Del.	15	3	5	1	5	-	-
E.S. CENTRAL	771	503	154	66	17	30	40
Birmingham, Ala.	171	111	28	18	5	8	11
Chattanooga, Tenn.	42	31	6	3	1	1	2
Knoxville, Tenn.	93	63	18	7	2	3	6
Lexington, Ky.	71	43	21	4	1	2	8
Memphis, Tenn.	144	95	28	11	3	7	10
Mobile, Ala.	85	58	14	8	1	4	-
Montgomery, Ala.	23	13	6	3	-	1	-
Nashville, Tenn.	142	89	33	12	4	4	3
W.S. CENTRAL	1,375	877	288	129	50	31	70
Austin, Tex.	93	62	19	12	-	-	4
Baton Rouge, La.	58	39	10	6	1	2	2
Corpus Christi, Tex.	73	53	12	5	-	3	4
Dallas, Tex.	179	95	43	18	16	7	9
El Paso, Tex.	50	34	11	2	2	1	1
Ft. Worth, Tex.	106	74	21	5	2	4	4
Houston, Tex.	384	214	98	52	16	4	24
Little Rock, Ark.	57	39	13	4	1	-	-
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	216	157	32	14	8	5	10
Shreveport, La.	65	49	8	4	1	3	7
Tulsa, Okla.	94	61	21	7	3	2	5
MOUNTAIN	898	588	181	81	28	19	49
Albuquerque, N.M.	97	66	21	5	2	3	3
Boise, Idaho	42	25	12	5	-	-	1
Colo. Springs, Colo.	43	31	10	1	-	1	3
Denver, Colo.	99	65	21	10	2	1	6
Las Vegas, Nev.	182	114	41	17	7	3	9
Ogden, Utah	24	17	7	-	-	-	-
Phoenix, Ariz.	147	84	34	12	9	7	6
Pueblo, Colo.	24	19	2	2	-	1	3
Salt Lake City, Utah	120	79	20	12	6	3	9
Tucson, Ariz.	120	88	13	17	2	-	9
PACIFIC	1,719	1,198	321	116	55	27	132
Berkeley, Calif.	18	9	4	3	-	2	-
Fresno, Calif.	74	44	16	7	7	-	5
Glendale, Calif.	19	14	4	1	-	-	4
Honolulu, Hawaii	58	36	19	1	-	2	5
Long Beach, Calif.	69	44	9	7	4	5	3
Los Angeles, Calif.	462	331	76	32	14	9	25
Pasadena, Calif.	19	15	4	-	-	-	4
Portland, Oreg.	137	86	30	12	9	-	6
Sacramento, Calif.	164	117	30	8	8	1	16
San Diego, Calif.	137	94	27	9	2	3	11
San Francisco, Calif.	117	86	23	7	-	1	12
San Jose, Calif.	165	110	38	14	1	2	13
Santa Cruz, Calif.	31	23	4	4	-	-	6
Seattle, Wash.	112	81	16	9	4	2	5
Spokane, Wash.	64	51	12	-	1	-	6
Tacoma, Wash.	73	57	9	2	5	-	11
TOTAL	11,342¶	7,581	2,271	893	332	250	615

U: Unavailable -: no reported cases

*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†Pneumonia and influenza.

§Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

Contributors to the Production of the *MMWR* (Weekly)

Weekly Notifiable Disease Morbidity Data and 122 Cities Mortality Data

Denise Koo, M.D., M.P.H.

State Support Team

Robert Fagan
Karl A. Brendel
Siobhan Gilchrist, M.P.H.
Harry Holden
Gerald Jones
Felicia Perry
Carol A. Worsham

CDC Operations Team

Carol M. Knowles
Deborah A. Adams
Willie J. Anderson
Christine R. Burgess
Patsy A. Hall
Myra A. Montalbano
Angela Trosclair, M.S.

Desktop Publishing and Graphics Support

Morie M. Higgins
Peter M. Jenkins

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy on Friday of each week, send an e-mail message to *listserv@listserv.cdc.gov*. The body content should read *SUBscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at *http://www.cdc.gov/* or from CDC's file transfer protocol server at *ftp.cdc.gov*. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to: Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone (404) 332-4555.

☆U.S. Government Printing Office: 1997-532-228/67019 Region IV

DEPARTMENT OF
HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control
and Prevention (CDC)
Atlanta, Georgia 30333

Official Business
Penalty for Private Use $300
Address Correction Requested

FIRST-CLASS MAIL
POSTAGE & FEES PAID
PHS/CDC
Permit No. G-284